

REMARKS

Claims 1 – 3 and 25 – 35 are currently pending in the Application. No claims have been amended, added or cancelled. Accordingly, no new matter has been added to the application.

Detailed discussion of the prior art, claims and Applicants' remarks with respect thereto may be found in the Amendment, filed April 21, 2009 (Amendment), the contents of which are incorporated herein by reference.

Examiner Interview

Applicants and the undersigned thank Examiners Saint Cyr and Pendleton for the courtesies extended during a phone Interview conducted on September 21, 2009, to discuss the present application and Office Action. During the Interview, the Examiner's prior art rejections were discussed, and in particular the Examiner's reading of the Brandt reference with respect to the present claims.

Although not completely reflected in the Interview Summary dated September 24, 2009, as a result of the Interview both Examiners understood Applicants' position and interpretation of the prior art generally, and acknowledged that the art of record (and in particular Brandt) did not teach a "temporal sliding window" as recited in independent claim 1. Although no formal agreement was reached, the Examiners requested that Applicants submit a formal response containing Applicants' arguments with respect to Brandt, and that a new Action would be sent upon receipt of a formal response. Such arguments are included below and are substantively unchanged with respect to those discussed during the Interview as well as those discussed in Applicants' previous submissions, including Applicants' Office Action responses dated February 4, 2008, September 20, 2008 and April 21, 2009.

Claim Rejection – § 103(a)

Claims 1 – 3 and 25 – 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,055,166 to Logan ("Logan") in view of U.S. Patent No. 6,646,655 to Brandt ("Brandt"). Applicants respectfully traverse this rejection.

Logan teaches a method of editing broadcast programming to provide some level of targeting. In this system, an editor of the broadcast programming signal (which includes “the user of the system, a broadcaster, or a third party”) facilitates initial editing which is followed by some level of automation. A series of signals and comparisons of those signals is used in the automation process.

Brandt teaches a method of generating a power point style slide show which is displayed along simultaneously with a video stream. The power point style slide show is generated based on the individual video frames of the input video stream. In the embodiments shown in Brandt, several different items (video, a slide show, etc.) are displayed simultaneously on a screen. (See Brandt, Fig. 13).

Independent claim 1 recites:

A method for video detection and replacement, the method comprising:

receiving an input video signal;

creating a temporal sliding window of initial length L seconds and running the sliding window the input video signal, such that at least a portion of the input video signal is captured by the temporal sliding window;

comparing a first segment of the portion of the input video signal captured by the temporal sliding window of initial length L seconds to a portion of stored fingerprint data;

expanding the temporal sliding window to have an expanded length approximately equal to the length of the stored fingerprint data if the first segment of the portion of the input video signal matches the portion of stored fingerprint data;

comparing an expanded segment of the input video signal captured by the expanded window having the expanded length with the stored fingerprint data; and

generating an output video signal comprising the input video signal, wherein the expanded segment of the input video signal is replaced with a replacement portion.

The combination of Logan and Brandt does not teach or suggest each and every element of independent claim 1.

The Examiner contends that, “Applicant argues that the cited references did not disclose a temporal sliding **show** that can be displayed concurrently with the main video and expanding temporal side window.” (Office Action, p. 2, emphasis added). However, Applicants never made such a statement. Rather, as set forth in the previous Amendment, Applicants argue that, “Brandt does not teach a sliding window.” (Amendment, p. 9). Applicants continue to maintain that neither Brandt nor Logan teaches a “sliding window.” Applicants also respectfully note that a “**slide show**” and the slides related to a slide show are not at all related to the “expanding sliding window” recited in claim 1, as contended by the Examiner.

1) Brandt does not teach a sliding window

The Examiner acknowledges that, Logan “did not explicitly disclose creating a sliding window of initial length L and running the sliding window over at least a portion of the input video signal.” (Office Action, p. 3). However, the Examiner contends that, “Brandt et al disclose creating a sliding window” at Fig. 1, elements 203 and 205, column 3 lines 21 – 27 and column 18, lines 30 – 33. Applicants respectfully submit that Brandt does not teach or suggest this or an analogous concept.

Both Figs. 1 and 13 of Brandt disclose a video presentation with a “slide presentation.” The slide presentation cannot be considered to be a “sliding window” as recited in independent claim 1, and certainly is not a “temporal sliding window of initial length L seconds.” The “slide” in Fig. 13 of Brandt is a presentation slide, such as a slide created using Microsoft PowerPoint. Brandt teaches that, “When the video is played back on a computer system display, corresponding slides from the output slide set may be automatically displayed in a separate window of the display at the same time that the slide is under discussion in the video.” (Brandt, column 3, lines 23 – 26). Column 18, lines 30 – 33 likewise teach a slide show slide which “appears” alongside the video. Thus, the slides taught by Brandt are consistently slide show style slides which appear concurrently with the video to the viewer rather than a “sliding window of initial length L” as recited in claim 1.

Moreover, Brandt does not teach or suggest a “sliding window” of any sort. The Examiner apparently considers “creating a sliding window” to be the same as a slide in a slide show presentation. (See Office Action, p. 4). Applicants respectfully submit that such a construction is unfounded. There is simply no basis in Brandt or the art generally to define a temporally-based “sliding window” as a slide in a slide show. Pursuant to MPEP 2111.01, “the claims must be interpreted as broadly as their terms reasonably allow ... this means that the words of the claim must be given their plain meaning unless the plain meaning is inconsistent with the specification.” See Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed. Cir. 2005), “the person of ordinary skill in the art is deemed to read the claim term...**in the context of the entire patent, including the specification**” (emphasis added). Thus, even though claims are given their broadest possible reasonable interpretation during examination, such interpretation cannot be inconsistent with the specification. See Phillips. “The ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” (MPEP 2111.01(III)). Thus, whether using the plain meaning or guidance from the specification, the term “sliding window” cannot be a slide in a slide show, as no person of ordinary skill in the art of video editing would understand the ordinary and customary meaning of the term “sliding window” to be the presentation of a slide show (i.e., a PowerPoint slide). To the extent that the Examiner disagrees and maintains that the plain meaning of “sliding window” is the same as a slide show, Applicants respectfully reminds the Examiner that this is not proper if the **“plain meaning is inconsistent with the specification.”** (MPEP 2111.01). The specification describes that, “A sliding window of length L seconds runs over the video, calculating the CCV fingerprints of the window.” (Specification, paragraph 84). Thus, an interpretation of a sliding window being a slide in a slide show is wholly inconsistent with the plain meaning of such term as well as the specification and can only be viewed as such if the claim term is improperly read “in a vacuum,” rather than “in the context of the written description.”

For all of the above reasons, Brandt does not teach or suggest a “sliding window,” let alone “creating a temporal sliding window of initial length L seconds and running the

sliding window the input video signal, such that at least a portion of the input video signal is captured by the temporal sliding window,” as recited in independent claim 1.

2) Brandt does not teach expanding a sliding window

The Examiner argues that Logan does not disclose, “expanding the sliding window of initial length L” as recited in claim 1, but contends that Brandt discloses this element at column 17 lines 36 – 47. Applicants respectfully submit that Brandt does not disclose this or an analogous concept.

As discussed above, the Examiner’s reading of Brandt is incorrect in that Brandt does not teach or suggest a “sliding window,” and, as such, can not be viewed as teaching “expanding the sliding window.” The Examiner reads the “zoom to match the size,” functionality of Brandt as a teaching of “expanding the sliding window.” As described in Brandt, “the inset frame may be zoomed ... to match the size to which the original frame would otherwise be.” (Brandt, column 17, lines 38 – 41). The inset frame referred to is “a second video sequence,” and not the slides. As such, even if a slide in a slide show is regarded as a sliding window, such slide is not “expanded,” as recited in independent claim 1. Rather, in Brandt, a video sequence is expanded, and is completely unrelated to the item which the Examiner regards as the sliding window. As such, Brandt does not teach “expanding the sliding window.”

Even if the Examiner disagrees, the zooming which occurs in Brandt is not expanded to an “expanded length approximately equal to the length of the stored fingerprint data if the first segment of the portion of the input video signal matches the portion of stored fingerprint data.” First, the “length” in claim 1 is “L seconds,” while the zooming function in Brandt expands the object in physical size – not in any temporal manner. Second, there is no mention in Brandt of expanding to the size of “fingerprint data,” but only, “zoomed to match the size to which the original frame would otherwise have been resized.”

For all of the above reasons, Brandt does not teach or suggest a “expanding the temporal sliding window,” let alone expanding it so the “expanded length approximately

equal to the length of the stored fingerprint data if the first segment of the portion of the input video signal matches the portion of stored fingerprint data,” as recited in claim 1.

Accordingly, Logan and Brandt, when taken separately or in combination, fail to teach or suggest each and every element of independent claim 1, and, thus, the Examiner has failed to make a prima facie case for obviousness. Moreover, given the lack of teachings of the references, it would not have been obvious for one skilled in the art to result in the claimed subject matter given a combination of Logan and Brandt.

Accordingly, independent claim 1 is believed to be allowable over the proposed combination of Logan and Brandt. Dependant claims 2 – 3 and 25 – 28 are believed to be allowable at least by their dependency on independent claim 1.

Claims 29 – 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logan in view of U.S. Patent application No. 2005/0166224 to Ficco (“Ficco”). Applicants respectfully traverse this rejection.

Claim 29 recites:

A method for video detection and replacement, the method comprising:

- (a) receiving an input video signal;
- (b) capturing a captured portion of L seconds of the received input video signal;
- (c) comparing the captured portion of the input video signal to an L second long portion of stored fingerprint data, the stored fingerprint data having a total fingerprint length greater than or equal to L;
- (d) if the captured portion of the input video signal matches the portion of stored fingerprint data, capturing an additional portion of the received input video signal, the additional portion being contiguous with the captured portion, such that an entire captured portion comprising the captured portion of the received input video signal plus the additional portion has an entire captured length that is approximately equal in length to the total fingerprint length of stored fingerprint data;

- (e) comparing the entire captured portion of the received input video signal to the stored fingerprint data; and
- (f) generating an output video signal comprising the input video signal, wherein the entire captured portion of the input video signal is replaced with a replacement portion if the entire captured portion of the input video signal substantially matches the fingerprint data.

The combination of Logan and Ficco does not teach or suggest each and every element of independent claim 29.

The Examiner contends that, “comparing the captured portion of the input video signal to an L second long portion of stored fingerprint data, the stored fingerprint data having a total fingerprint length greater than or equal to L,” is taught by Logan when a “user would match the marking signals received against the buffered broadcast program.” Logan, however, does not teach or suggest a fingerprint, let alone a fingerprint as recited in claim 29. Furthermore, the user in Logan does not compare and match video to “a fingerprint” which could “match the portion of input video” as recited in claim 29. The user in Logan reviews the video for “marking signals.” A “marking signal” is “representative of information for modifying the broadcast programming signal.” (Logan, column 2, lines 30 – 31). As such, the user in Logan watches the video to find a marking signal and not compare “the captured portion of the input video signal to an L second long portion of stored fingerprint data.” In fact, the user does not compare the video to anything; rather, the user simply views and waits until he sees a marking signal. Additionally, the determination and/or comparison of a video fingerprint is a concept that cannot be accomplished in the user’s mind as suggested by the Examiner.

The Examiner further contends that that Logan teaches:

if the captured portion of the input video signal matches the portion of stored fingerprint data, **capturing an additional portion of the received input video signal**, the additional portion being contiguous with the captured portion, such that an entire captured portion comprising the captured portion of the received input video signal plus the additional portion has an entire captured length that is

approximately equal in length to the total fingerprint length of stored fingerprint data.

This element of the claim relies on the comparing of the previous element. The Examiner, however, relies on “the segment filter 64” Of Logan. The segment filter, however, does not teach “capturing an additional portion of the received input video signal” in the event that the “captured portion of the input video signal matches the portion of stored fingerprint data.” In fact, nowhere in Logan is any similar concept taught.

For all of the above reasons, Logan does not teach or suggest these claim elements. Ficco does not fill the gaps left by Logan. Logan and Ficco, when taken separately or in combination, fail to teach each and every element of claim 29, and, thus, the Examiner has failed to make a prima facie case for obviousness. Moreover, given the teachings of the references, it would not have been obvious for one skilled in the art to result in the claimed subject matter given a combination of Logan and Ficco.

Conclusion

In view of the foregoing remarks, Applicants respectfully submit that the Examiner's rejections have been overcome, and that the application, including claims 1 – 3 and 25 – 35, is in condition for allowance. Reconsideration and withdrawal of the Examiner's rejections and an early Notice of Allowance are respectfully requested.

Respectfully submitted,

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